VICTORIA UNIVERSITY
MELBOURNE AUSTRALIA

How do research-intensive universities portray employability strategies? A review of their websites

This is the Accepted version of the following publication

HOW DO RESEARCH-INTENSIVE UNIVERSITIES PORTRAY EMPLOYABILITY STRATEGIES? A REVIEW OF THEIR WEBSITES

Employability development is a strategic priority for universities across advanced western economies. Despite this, there is no systematic study of employability development approaches internationally. In this study we considered how universities portray employability on the public pages of their websites. We undertook website content analysis of 107 research-intensive universities in Australia, Canada, the United Kingdom (UK) and the United States (US). Using Farenga and Quinlan (2015), we classified these strategies as *Portfolio*, *Hands-off*, *Award*, and *Non-embedded*. *Portfolio* or *Award* strategies were the most common across all four locations, *Hands-off* and Non-embedded strategies were more common to US universities, and *Award* was more common in the UK. Universities focused on either possessional or positional approaches to employability (Holmes, 2015). We advocate for a pedagogical shift towards processual approaches in which responsibility for employability development is shared.

Universities are under enormous pressure to develop graduates who can negotiate a crowded, volatile and globally competitive labour market (Boden & Nedeva, 2010; Office for National Statistics, 2012; Siefert, 2011). In this context, employability has shifted from a focus on 'job-getting' towards the metacognitive capacity to adapt, lead and learn. Universities have

responded with numerous initiatives to enhance student employability. These include multiple forms of work-integrated learning (Freudenberg, Brimble, & Cameron, 2011), optional or compulsory stand-alone employability units, and employability activities embedded throughout degree programs (Pegg et al., 2012).

Research into the efficacy of employability initiatives has typically focused on activities across a single or small group of institutions or departments (see for example, Faulkner et al., 2013; Mason, Williams, & Cranmer, 2009; Owens & Tibby, 2014; Patrick, & Peach, 2010; Watson, 2011). Very rarely does research report on the strategy adopted at an institution-wide level. In one such study, Farenga and Quinlan (2015) reviewed careers services websites from 24 research-intensive universities in the UK. The authors proposed three strategic models of employability development: *Hands-off*, *Portfolio*, and *Award* (defined below). We extended Farenga and Quinlan's (2015) study with a sample of 107 research-intensive universities across four locations (UK, Australia, Canada, and the US). Our focus was universities' portrayal of employability on the public pages of their websites: namely, their communication of employability to the outside world. We considered two questions:

1. What employability related content appears in the public pages of university websites?

2. What does this content communicate about employability strategies?

Employability is a contested concept that lacks precision and clarity (Hillage and Pollard, 1998), defined by Yorke (2006) as a complex and non-linear idea far broader than a "graduate's achievements and his/her potential to obtain a 'graduate job'" (Yorke, 2006, p.2). Our research focused on the publicly available employability information found on university websites. This is the information viewed by external visitors and it presents a unique picture, an external view, of how universities portray employability. In this study we employed Holmes's (2013) framework for analyzing university employability perspectives and approaches, which he defined as *Possessional* (possession of employability attributes), *Positional* (capital), and *Processual* (focus on the process of employability development). In line with this we adopted Holmes's (2013) definition of employability development: namely, the process of creating a worker identity where one develops the capacity for self-management, life-long learning, and adaptability.

To shed light on the conceptual frameworks on which these strategies were based, we drew on Farenga and Quinlan's (2015) descriptions of three employability models utilised by the UK Russell Group of universities: Hands-off, Portfolio, and Award. The authors characterise the Hands-off model as one where skills such as problem solving, communication skills, and leadership are seen as being naturally developed through the academic programs; specific gaps identified by students might be filled through activities offered by a careers service. This model is typified by a clear distinction between the role of academic programs and the role of careers service in developing student employability, often with little interaction between the two.

In contrast, the Portfolio model is characterised as one where students are offered a portfolio of opportunities to develop their employability skills. Some of these are embedded within academic programs, while others are offered as extra-curricular opportunities through a careers centre or similar service; these include credit and non-credit-bearing activities. Portfolio models incorporate communication between academic departments and central services such that both faculty (academic staff) and careers advisors contribute to employability delivery. In the Award model, the main strategy is to offer a formal credential rather than a "pick and choose" menu of offerings. These often come from both faculty and careers advisors, and completing students receive an additional transcript, certificate, or similar award.

According to Holmes (2013), the possessional approach is one of the most common approaches to graduate employability and focuses on graduates possessing skills, abilities, or characteristics needed for employment. Conceptually, the possessional approach is aligned with demands for "employable" graduates, and as such it includes the development of generic skills that employers believe to be missing (Van der Heijde & Van de Hejden, 2006). Recognising the difficulties of developing and evaluating these items, a number of countries have established graduate attribute frameworks. For example, Canada has developed an Employability Skills Profile (ESP) that delineates three major themes of *academic*, *personal management*, and *teamwork* (Leroux & Lafleur, 1995). In Australia, graduate attributes are detailed in a Blueprint for Career Development (Commonwealth of Australia, 2010) that emphasizes *Personal* management, *learning and work* exploration, and *career building competencies*.

Positionality, Holmes's second approach, concerns the idea that one's social and cultural relationship to the labour market can influence the probability of employability. Employability from this perspective is a "complex construct encompassing the wider personal, social, economic, and labour market circumstances" (Sin & Neave, 2014, p. 3). It is also a reciprocal relationship as one's social, economic, and cultural capital influences changes with local, state, and national labour markets (Brown, Hesketh, & Williams, 2003; Yorke, 2006). Positionality highlights that students' attainment of skills, attributes, or particular characteristics through higher education study does not necessarily heighten their social or cultural capital (Bourdieu, 1986), but that individuals from advantaged social backgrounds will better position themselves for limited, highly skilled roles.

Holmes's third approach is termed processual and moves beyond skills to highlight the relationship between the integrative and continually interactive process of employability development and what Holmes (2013) has termed "gatekeepers". The emphasis here is to develop "work-related dispositions and identities" (Tomlinson, 2012, p. 11) which "lead others [gatekeepers] to ascribe to them the identity of being a person worthy of being employed" (Holmes, 2013, p. 30). These identities form as students "(re)conceptualise their strengths, interests and goals and experience a corresponding increase in curiosity, motivation, creativity and problem-solving" (Bennett, 2012, p. 27) through repeated engagement with learning opportunities and the workforce.

Method

Context and sample

Websites are one of the most accessible public faces of universities, accessible by multiple stakeholders including current and potential students, alumni, parents, educationalists, philanthropists, journalists, and employers. Institutional websites help shape the public image of an institution and they represent an important component of an institution's integrated marketing strategy. As such, websites should arguably reflect the most important messages a university wishes to portray in the shaping of its image.

Of course, websites are only one communication vehicle. Here, our methodological approach is informed by the work of Saichaie and Morphew (2014), who employed website content analysis to consider the strategic position of universities in connection with knowledge economy debates. Saichaie and Morphew (2014, p. 500) remarked on the need for research on institutional websites: while the messages communicated by institutional websites "should tell us much about how IHEs [Institutions of Higher Education] represent their purposes to prospective students", in fact little is known about what these messages portray.

The rationale for the selection of research-intensive universities in our study is three-fold. First, our study extends that of Farenga and Quinlan (2015), who undertook a content review of the careers services websites for these institutions and used this information to classify employability models among the UK Russell Group of 24 public research universities. The

Russell Group represents a group of "leading UK universities which are committed to maintaining the very best research, an outstanding teaching and learning experience" (Russell Group of Universities, n. d). We used similar groupings of research-intensive universities from three further English speaking countries: the US (Association of American Universities), Canada (the U15 Group of Canadian Research Universities), and Australia (the Group of Eight or Go8). Thus, shown at Table 1, cases for our study included all 107 members of the above university groups where research performance is the principal criterion for membership. Second, in the increasingly competitive higher education market there is a common perception that research-intensive universities may be less reliant on explicit, public efforts to engage with employability to meet recruitment and graduate destination targets than are newer, teaching-intensive or technology universities, largely because of reputational capital (Norton & Carroll, 2015). Finally, our decision to undertake a broad international comparison was influenced by the increasing mobility of higher education students: data from the Organisation for Economic Co-operation and Development (OECD) confirm that over the two decades until 2011, the number of international higher education students grew threefold to almost 4.3 million worldwide (oecd.org, 2015).

[Please insert Table 1 here. Table 1: Summary of demographics for the sample universities]

Framework

We operationalised Farenga and Quinlan's qualitative descriptions of Hands-off, Portfolio, and Award models to determine how universities portray employability on the public pages of their websites. Defining characteristics for each model are presented below:

Hands-off   Three criteria, all of which must be met:

1.   Employability development is not embedded within degree programs;

2.   There is no employability award; and

3.   Only non-credit bearing activities and events are available to students.

Portfolio   Three criteria, all of which must be met:

1.   Students can access multiple employability development opportunities;

2.   Some employability development is embedded within degree programs (beyond that required for accreditation); and

3.   Employability development opportunities are variously credit- and non-credit bearing, or entirely non-credit bearing.

Award   An institution-wide employability award that is formally recognized in some way: for example, the award appears on a transcript, co-curricular record or separate certificate.

Team members entered their observations into an online survey hosted at SurveyMonkey Inc. A trial with two university website cases led to refinements of the questions and explanatory text to ensure consistency of approach. The final instrument included 22 items comprising both closed and open questions and repeated themes for the purpose of triangulation. For each university, demographic information (student numbers, ratio of undergraduate to postgraduate students and numbers of academic staff) was collected. Employability content was gathered on the following five themes:

1. Reputation of the university and link to job prospects: the website indicates that attending the institution will, because of high reputation, enhance job prospects; graduate destination data included;

2. Careers service and its role: the institution has a careers service, which provides opportunities for employability development;

3. Presence of an employability award: a university-wide award that includes opportunities to develop multiple employability skills and is formally recognised through an official transcript or similar;

4. Multiple opportunities for students to engage with employability: multiple opportunities, credit-bearing or non-credit bearing, and evidence of opportunities embedded within academic programs; and

5.   A list of graduate attributes that are university-wide and refer to employability or graduate job or career-preparedness.

Procedure

The procedure for analysis was informed by Groneman Hite and Railsback's (2010) study of 100 university websites through which a number of common website inclusions, reflecting the needs of both internal and external stakeholders, was identified. Groneman Hite and Railsback (2010) confirmed the need for website users to be able to complete their searches in as little as two clicks without the use of a scroll bar in order to access messages the authors deemed to be the most important for shaping an institution's holistic public image. However, 60% of the university websites analysed by Groneman Hite and Railsback included a scroll bar on their homepage. Accordingly, we adapted their protocol when conducting our analysis:

1.   Searches were restricted to three (rather than two) clicks from the identified page with use of scroll bar permissible;

2.   Searches were undertaken from the following pages:

     a.   Home page;

     b.   'About' page on which the university was described;

     c.   Pages for future students: e.g. admissions, new/potential students, courses;

d. Pages describing careers services / career development / student

    employment / workshops relating to employability;

    e. Pages describing the university mission and its vision statement; and

    f. Pages for current students: e.g. student life, activities and/or organizations.

To reduce error and bias in coding (Mays & Pope, 2000) two primary coders initially analysed ten universities selected alphabetically from the 107 institutions, ensuring proportional representation from each group. These results were discussed, and once consensus results for each question was reached, one primary coder and a second coder analysed each remaining website. Inter-coder reliability was calculated for each instrument question. Where inter-coder reliability was less than 0.8, a third coder analysed the website (Miles & Huberman, 1994). Agreement of two of the three coders was recorded as the final result. The final dataset had an inter-coder reliability of .86 to .95 for each question.

Results

Employability content presented on university websites

Engagement with employability was found to some extent in all the university websites analysed as evidenced at Table 2. With the exception of two universities in the US, all institutions operated a centralised careers service. Given Farenga and Quinlan's (2015)

suggestion that the Hands-off model is more likely at those institutions that rely on their reputation to attract students, we sought to identify how many institutional websites linked enhanced employment prospects to high institutional reputation. This was evidenced through statements relating to university rankings combined with narratives such as: "12th in the nation for sought-after graduates." Evidence of this link was found in just over half (51.4%) the institutions analysed. As seen below, institution-wide graduate attributes were far more common in UK and Australian universities, with half these institutions describing institution-wide graduate attributes (54.2% and 50% respectively) in comparison with those in Canada (13.3%) and the US (1.7%).

[Please insert Table 2 here. Table 2: Employability-related content presented on university websites (*Count* (%))]

To understand the different modes of employability provision, we sought evidence of employability development through degree programs. We found evidence of activities embedded within degree programs at 75% of UK universities (highest) and 37.5% of Australian universities (lowest). We considered embedded opportunities within degree programs to be those beyond work-related learning required as part of professional training programs such as in Nursing, Engineering and Medicine. Examples included professional development courses

designed explicitly to develop employability skills, and experiential learning opportunities including work placements.

We found evidence that the vast majority of universities (100% - 96.7%) offered multiple opportunities for students to engage with employability: that is, at least one opportunity beyond a standard drop-in careers service. These opportunities were a mix of credit bearing and non-credit bearing activities in 87.5% of UK universities (highest) to just 38.0% in US universities (lowest). There was substantial diversity in institutional opportunities. These ranged from common activities such as careers workshops, short-term internships, careers fairs and employer networking/information sessions, to less common activities such as those highlighted at Table 3. We also noted that many of the US universities presented strong alumni links through their websites.

[Please insert Table 3 here. Table 3: Less common opportunities for employability development]

Classification of employability strategies

Following the work of Farenga and Quinlan (2015), employability strategies utilised by the universities were classified as Hands-off, Portfolio, or Award using the criteria presented earlier. Analysed as a single cohort, the Portfolio strategy emerged as the most prevalent employability strategy (adopted by 39.3%) followed by a similar occurrence of Hands-off and

Award model (22.4% and 18.7% respectively). However, 19.6% of the cases did not fall within these categories. This group labelled "Non-embedded" was characterised by the absence of a formal employability award and had no evidence of embedded employability development. However, students at these institutions had opportunities to engage in centrally delivered credit and non-credit bearing employability activities.

Shown at Figure 1, there were marked differences in employability development strategies when viewed by institutional location. While the Portfolio model was the most prevalent in all locations, the Awards model dominated in the UK (58.3% of the UK universities). In contrast, the Awards model was used much less in Australia and Canada (25% and 20%, respectively) and was virtually absent from universities in the US (1.7%). This trend was reversed for the Hands-off model, which was employed more frequently in US universities (30%) than those in Australia (25%) and Canada (20%). Indeed, the Hands-off model was observed in only 4.2% of UK universities. Adoption of the Non-embedded model was most prominent in the US population with approximately one-quarter of US universities (26.7%) categorised in this way. We also assessed whether reputational claims were more common in universities operating the Hands-off model. Our analysis showed that this was not the case, with reputational claims being highest amongst universities classified as Award (75%) and lowest with the Hands-off (45.8%) and Non-embedded (42.9%).

[Please insert Figure 1 here. Figure 1: Prevalence of employability models by location]

Discussion

This study utilised Farenga and Quinlan's three employability models to classify the employability strategies viewed on the websites of 107 research-intensive universities. We observed that Farenga and Quinlan's three models were manifest within all four of our location-specific university groupings. However, we also identified a fourth transitional model for which we coined the term "Non-embedded". This model sits between Hands off and Portfolio and is characterised by the availability of multiple, centrally delivered employability development opportunities all offered outside the formal curriculum. Our work shows that employability models can be positioned along a continuum of institutional involvement and responsibility, with the Hands-Off at one end, followed by Non-embedded, then Portfolio, and ending with Award at the opposite end of the continuum. We found that location plays a role as to where institutions may cluster on this spectrum, with US institutions clustering towards the Hands-off end while UK institutions appear at the opposite, Award end.

We found no evidence of Farenga and Quinlan's assertion that (high) reputational claims are more common amongst institutions that utilise a Hands-off model. Rather, we found that such claims were higher on institutional websites using the Awards model. Thus the way in which institutions may choose to enact employability is more likely to be linked with geographical location and the employability discourse associated with that location. For example, the

strong employability agenda in the UK (see Ekaterina, 2013) explains to some extent the more formalised, Awards approach to employability in the UK. It also explains the frequency of reputational statements associated with enhancing job prospects, found on the sites of universities operating the Awards model.

We next ask what the different models might mean in higher education learning and teaching. With an emphasis on the operationalisation of employability development, the discussion is organised according to Holmes's (2013) possessional, positional, and processual approaches.

The possessional approach to employability development

Holmes's (2013) possessional approach focuses on graduates possessing a collection of skills, abilities, or characteristics needed for employment. Initiatives used to develop skills and qualities within a possessional approach might include a combination of opportunities that are credit-bearing or non-credit bearing, embedded in the curriculum, co-curricular, or extra-curricular. Thus the possessional approach aligns with Farenga and Quinlan's Portfolio model (2015). Where a Portfolio model leads to a formal credential such as a certificate, employability award, separate or modified transcript, the possessional approach encompasses both Portfolio and Award strategies.

Our findings, which show that the Portfolio and Award strategies are the most dominant across all four study locations, are consistent with Holmes's (2013) contention that in policy

and practice discourse the most common approach to employability development is possessional. Associated with the possessional approach has been the establishment of graduate attribute lists or frameworks (Holmes, 2013). We note here that Holmes is critical of the "skills and attributes" movement, and that his categorisations do not seek to favour such an approach. In our study, we identified institutional-level graduate attributes in approximately half of our UK and Australian sampled universities and much lower in the US and Canadian universities. We acknowledge that language and context may have been factors here, in that Australia and the UK have engaged in rigorous national debates about graduate attributes (Oliver, 2011), whilst in other countries, discussion and therefore terminology has been much less explicit. This language may also be a reflection of a broader philosophical difference between countries, where the emphasis of undergraduate education in the US and Canada is for a broad undergraduate education (liberal arts) with more career focus at the postgraduate level. Alternatively, undergraduate degrees at Australian and UK universities tend to be more specialised.

Opportunities to accrue both skills and additional or amended academic transcripts often entail shared responsibility as institutions make opportunities available and students select those in which they will be involved. The employability awards seen in the current study tended to be the result of an institution-wide response. As such they were most often centrally organised and monitored, bringing together and recognising a range of both centralised and faculty based activities. An institution-wide response to employability might indicate institutional

commitment at the level of policy and strategy and might, in turn suggest meaningful engagement in the development of employability. Surprisingly, few awards were featured within the home and recruitment pages of institutional websites as might be expected if they were primarily recruitment tools.

The positional approach to employability development

As noted by Farenga and Quinlan (2015), students engaged in the three models have multiple opportunities to build their employability and gain valuable previews of career; this was also the case in our fourth model. Thus, building up personal capital through higher education study should enable graduates to better position themselves in the employment market. However, students and graduates with social and cultural capital are advantaged in the employment market, using their resources to access higher earnings (Norton & Carroll, 2015). Employers reinforce this selective advantage by recruiting from prestigious universities (Holmes, 2013; Tomlinson, 2012). As such, the Hands-off model may align with Holmes's positional approach in that it "may work well for students whose backgrounds are already privileged enough to have tacit labor-market awareness, networks, and cultural capital" (Farenga & Quinlan, 2015, p. 10).

We found the Hands-off model to be the second most prevalent across our population, but less than we had anticipated given our focus on research-intensive, typically prestigious universities. Indeed, we found that just over half the institutional websites explicitly linked enhanced employment prospects to high institutional reputation. These universities marketed

their ability to heighten positionality through opportunities for networking with successful business owners or prosperous alumni, positioning access to professional networks as an employability advantage (Hillage & Pollard, 1998; Tomlinson, 2007). In the US group of universities in particular, university websites evidenced strong alumni networks. Other learning and teaching activities to enhance social or cultural capital included opportunities for students to shadow, volunteer, or intern in their intended professions. In a Hands-off model, it is the responsibility of students to identify the need for development and seek out opportunities for development (Farenga & Quinlan, 2015).

The processual approach to employability development

One of the disadvantages of the possessional approach is that it can ignore the *process* (Holmes's (2013) third approach) through which skills and knowledge are identified, conceptualized and realised, in line with emerging identity. It is through this process that students come to imagine, convey and refine their graduate identities (Bennett, 2012; Holmes, 2013). It is similarly the process of self-authorship (Baxter-Magolda, 2001) through which individuals "develop along interrelated epistemological, intrapersonal and interpersonal dimensions towards making independent judgments about knowledge, self, values and relationships" with others (Bennett & Hennekam, in review).

Tangible examples of processual employability development include students' creation of professional portfolios. Students' reflections on why or how they have learned what they have

learned is key to the processual nature of portfolios. Rather than a stagnate indicator of skills and abilities, students' identification and re-identification of self continues in their pursuit of emerging professional identity (Peet, 2015). As such, they learn "how to portray themselves as focused and capable individuals with definable skills sets, and also as adaptable, lifelong learners who can reshape themselves to different contexts and develop new skillsets as required" (Bennett et al., 2016, p. 120). The processual view of graduate employability is further supported through the work of Okay-Somerville and Scholarios (2015), who have shown that career-self management behaviours, in particular career exploration, networking and guidance seeking, can significantly enhance graduate employability.

Concluding comments

We begin by expressing the limitations of this study alongside some of the opportunities for further research. We acknowledge that whilst institutional websites are an important mode of communication, they represent only one such mode. Further examples of employability development are undoubtedly hidden beyond the three-click limit of our website search or behind password-protected institutional sites. We also acknowledge that terms such as employability and graduate attributes vary between countries. This was mitigated by the inclusion of multiple terms as part of the search strategy, informed by authors from each of the countries studied. Further, our study focused on research-intensive universities, and our findings cannot be generalised to institutions that are not research intensive. Further research

might expand the population to other university groupings to determine whether different employability development approaches apply, whether new models emerge, and/or whether further insight into processual approaches can be gained. Following Farenga and Quinlan (2015) we placed each university within a single category. As such, our analysis provides an overview of employability strategies at the institutional level and does not reflect the fine detail of all programs available within the institution. Similarly, we acknowledge that the way in which employability is outwardly portrayed may differ from the way in which it is internally perceived and operationalised. We encourage other scholars to compare the similarities and differences of these perspectives.

The study has implications for both policy and practice. First, it provides a framework with which institutions might gauge how employability is being portrayed, enacted or operationalised. This might lead to consideration of the philosophies underpinning each strategy and the responsibility associated with each of these. It may also stimulate careful consideration of the employability messages institutions communicate to external stakeholders and how these are positioned on their websites. Conceptual thinking about employability at the institutional level might lead to employability strategies that prompt a pedagogical shift towards processual approaches and shared responsibility between institutions and students. This will most likely involve career services staff in the co-delivery of programs alongside discipline educators as they seek to embed both the functional and the cognitive aspects of employability development.

Our findings illustrate that the three models proposed by Farenga and Quinlan are manifest in an international population of research-intensive universities as reported here. In addition, we identified a fourth model that represented a transition between Hands off and Portfolio; this was termed Non-embedded. We noted geographical differences in the dominant model used. These differences appear to reflect international differences in higher education and broader economic policy and structure; future research might seek to clarify these distinctions. By aligning the models of employability development with the three approaches devised by Holmes (2013), we were able to show that the strategy utilised by universities to develop employability are mostly possessional or positional; we saw limited evidence of the processual approach.

Discussion of our findings in the context of Holmes's approaches and Farenga and Quinlan's models indicates that the public (website) face of employability development strategies for the universities we reviewed is positional or possessional. As outlined above, the selected strategy also indicates whether the responsibility for employability development is that of the student or the institution, or whether it is shared between the two. We assert that *process* is central to employability development; therefore the most effective strategies for employability development combine the development of skills, attributes *and* student/graduate identity. This is supported by the work of multiple authors (see Bennett, 2012; Holmes, 2013; Peet, 2015; Porter & Phelps, 2014).

Concluding comments

For some students, graduate identity is understood in a single instance, "like waking up one day and realising that I could do all these things I didn't know I could do" (Peet, 2015, p. 18). For most students, however, the process is gradual and it is a central concern for learning and teaching. In this sense, employability becomes a set of person-centred constructs that involve individual proactivity and reflexivity relating to career identity, personal adaptability, and social and human capital (Fugate, Kinicki, & Ashforth, 2004). We argue that a pedagogical shift towards process and relevance, through reflection, engagement and experiential learning, offers multiple opportunities to engage with industry, community, peers, alumni and career services. This shift has the potential to move each model towards a processual approach in which responsibility between student, institution and employer is shared.

The issue of shared responsibility brings to the fore the cognitive aspect of employability through which "learners develop along cognitive dimensions with respect to their dispositions and capacities to engage as professionals" (Bennett, 2016, p. 392). It is this, rather than the functional dimension of employability, that aligns with the purpose of higher education.

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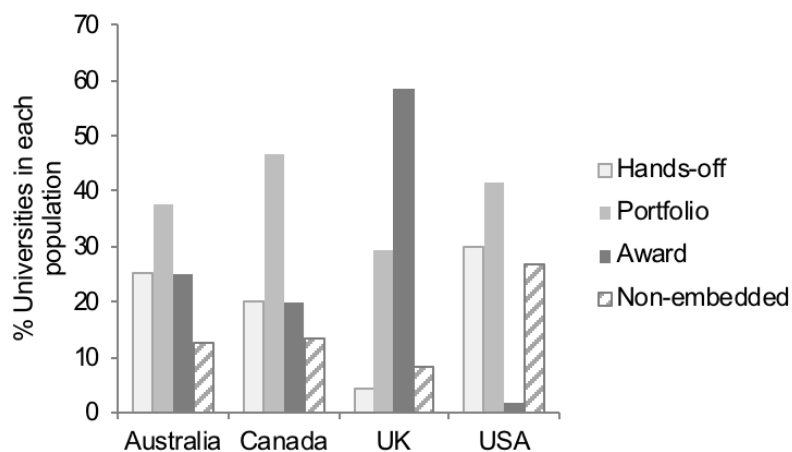
Figure 1: Prevalence of employability strategy by location

Table 1: Summary of demographics for the sample universities

Country and university group	Universities (count)	Student population (range)	Undergraduate students (range)
Australia - Group of Eight	8	21,113 - 67,076	48% - 70%
Canada - Group of Canadian Research Universities	15	11,300 - 84,556	70% - 85%
UK - Russell Group	24	10,601 - 41,463	40% - 85%
US - Association of American Universities	60*	2,277 - 80,531	28% - 95%

Note: Two Canadian universities belonged to both the US and Canadian groupings. These were excluded from the US list to avoid duplication.

Table 2: Employability-related content presented on university websites (*Count* (%))

Country	Reputation = enhanced employment prospects	Graduate destination data	Central careers service	Institution-wide graduate attributes	Employability developed through degree programs	Multiple opportunities to develop employability	Credit and non-credit bearing opportunities
Australia	6 (75)	4 (50)	8 (100)	4 (50)	3 (37.5)	8 (100)	4 (50)
Canada	3 (20)	6 (40)	15 (100)	2 (13.3)	10 (66.7)	15 (100)	11 (73.3)

| UK | 19 (79) | 17 (70.8) | 24 (100) | 13 (54.2) | 18 (75) | 24 (100) | 21 (87.5) |
| US | 27 (45) | 27 (45) | 58 (96.7) | 1 (1.7) | 26 (43.3) | 58 (96.7) | 38 (63.3) |

Table 3: Less common opportunities for employability development

Opportunity Type	Description and variations	Delivery OC: on campus WP: workplace	Credit bearing NC: non-credit C: credit
Industry insight sessions/programs	Targeted programs for specific professions, comprising workshops	OC	NC
Enterprise support, business start-up, incubators	May be alumni-linked and/or provide seed-funding	OC, WP	NC
Entrepreneurship training/award	Dedicated space, events, workshops, seed funding	OC, WP	NC, C
Mentorship	Mentored by alumni or students	OC, WP	NC
Dual delivery	Students alternate academic study with semesters of full-time, paid employment in industry	WP	NC, C
Experiential learning	Simulations, mock workplace scenarios, placement, field work	OC, WP	NC, C
Undergraduate research programs	Research skills and experiences	OC	NC, C
Leadership programs or awards	A range of professional skills, some international	On campus	NC, C
Corporate tours outside of semester	Tours of industries, business operations and culture in major cities or regions of employment	WP	NC
Women's programs	Personal and professional development for women	OC	NC

Table 4: Employability development alignment and responsibility

Approach Model	Positional	Processual	Possessional	Responsibility
Hands-off	✔*			Student
Non-embedded			✔	Institution and student
Portfolio			✔	Institution and student
Award			✔	Institution

*✔ indicates the alignment of strategy and model

Table 5: An illustration of how employability development might focus on the processual approach with shared responsibility

Approach Model	Positional	Processual	Possessional	Responsibility
Hands-off	→	✔	←	Shared
Non-embedded		✔	←	Shared
embedded			←	
Portfolio		✔		Shared

Award	✔	Shared

Please cite as: Bennett, D., Knight, E., Kuchel, L., Divan, A., Horn, J., van Reyk, D., & Burke da Silva, K. (2017). How do research-intensive research universities portray employability strategies? A review of their websites. *Australian Journal of Career Development, 26*(2), 52-61. doi: 10.1177/1038416217714475